

CHMIELOWO MI

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **80**
- SRM **16.4**
- Style **Brown IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **70 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **60 min** at **70C**
- Keep mash **10 min** at **76C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pilsner malt | 2 kg (33.9%) | 82 % | 4 |
| Grain | Pilzniejszy | 2 kg (33.9%) | 81 % | 4 |
| Grain | Strzegom Bursztynowy | 1 kg (16.9%) | 70 % | 49 |
| Grain | Caraaroma | 0.4 kg (6.8%) | 78 % | 400 |
| Grain | Carared | 0.5 kg (8.5%) | 75 % | 39 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|--------|------------|
| Boil | Marynka | 30 g | 60 min | 10 % |
| Boil | Iunga | 30 g | 30 min | 11 % |
| Boil | Simcoe | 30 g | 20 min | 13.2 % |
| Whirlpool | Citra | 30 g | 10 min | 12 % |